

The Ubiquitous Influence of Mentors on Postgraduates

Xiaohui Wang

Fujian Normal University, Fuzhou 350117, Fujian Province, China

Abstract: Tutors and graduate students are a force that can not be ignored in the scientific research team of colleges and universities. Understanding the construction of the ubiquitous influence of mentors on graduate students is of great significance to strengthen the ubiquitous influence among students, promote the interaction between teachers and students, and improve the quality of graduate education in colleges and universities. Based on 28 interview data, this paper collates and analyzes the ubiquitous influence by using Nvivo11.0 software, and summarizes the ubiquitous influence into three aspects, namely, the basis of ubiquitous influence-spatio-temporal dispersion, the process-mode diversity of ubiquitous influence, and the comprehensiveness of the result-result of ubiquitous influence, and constructs the concept of tutor's ubiquitous influence on graduate students.

Keywords: Mentor; Graduate student; Ubiquitous influence

Publication date: April, 2020

Publication online: 30 April, 2020

***Corresponding author:** Xiaohui Wang, 2447839352@qq.com

1 Question raised

The word ubiquitous (ubiquitous) comes from Latin, meaning ubiquitous and ubiquitous^[1]. The tutor's ubiquitous influence on graduate students can be through the relationship of communication and symbiosis in the educational field and non-educational field, taking the mutual subject as the care point, following the endogenesis of psychological

development, and in the communicative environment of dialogue behavior to have an invisible endogenous effect. The communication between tutors and graduate students combines a variety of communication forms, including formal communication and informal communication, direct communication and indirect communication and so on. A variety of ways of communication help to resolve the boundaries between teachers and students, with a wide range of interaction, wide connection and aggregation. The influence of mentors on graduate students according to the frequency of communication, there is a ubiquitous internal ubiquitous influence.

2 Research and design

2.1 Research methods and tools

This study mainly uses qualitative research, which refers to "using the researcher himself as a research tool, using a variety of data collection methods to explore social phenomena as a whole in natural situations, and using inductive method to analyze data and formation theory." an activity that interacts with the research object to obtain an explanatory understanding of its behavior and meaning construction^[2]. The data analysis tool of this study is the software of NVivo11.0 qualitative research and analysis issued by QSR Company of Australia^[3].

2.2 Sample introduction

The 28 postgraduates were interviewed. The distribution characteristics of the basic information of the interviewees are shown in Table 1.

Table 1. Distribution characteristics of basic information of interviewees

Project	Option	Number	Percentage(%)
Gender	Male	12	42.9
	Female	16	57.1
Grade	First year graduated school student	10	35.7
	Second year graduated school student	10	35.7
	Third year graduated school student	8	28.6
Discipline background	Science	9	32.1
	Engineering Course	9	32.1
	Social science	10	35.8

2.3 Research process

2.3.1 Interview

In the course of the study, semi-structured interviews were used to conduct personal interviews with the subjects. The interview content of this study mainly includes four questions:

(1) How do you interact with your mentor?

(2) What aspects of your mentor do you think have a great influence on you, tell me something impressive between you and your mentor?

(3) How do you evaluate the influence of your mentor on you?

2.3.2 Data analysis

There are two main coding functions of Nvivo11.0 free node (free nodes) and tree node (tree nodes)^[4]. First of all, with the help of Nvivo11.0 software to collect 28 interview text materials into the internal materials of the software, in order to ensure the validity of this study, it is necessary to collect rich original materials and ensure the authenticity and validity of the data. Secondly, the written materials of 28 interviews were coded and analyzed. Read each sentence of the material carefully and encode it word by word. Finally, carefully read all the material content under each node to modify the node name, merge or reorganize the similar content under different nodes, study the logic of the tree node, and adjust the position of some child nodes appropriately^[5]. By sorting out the nodes, 8 tree nodes and 37 child nodes are constructed (see Table 2 for specific node hierarchy and material information).

Table 2. Summary table of tree nodes and child nodes

Tree node and code number	Child node sample date	Tree node and code number	Child node sample date
1.Assign tasks (109)	Assign tasks by e-mail	5.Personality influence (114)	Remind yourself not to be the same person as your mentor.
2.Guidance mode (122)	Tutors seldom guide students' papers.	6.Behavior influence (124)	The tutor works seriously and the students prepare their homework carefully.
3.Meeting field (177)	Meet at the lab.	7.Positive influence (121)	The scientific research training of the students by the tutor has improved the students' academic ability.
4.Academic influence (107)	Want to graduate quickly and find a job to earn money.	8.Negative influence (128)	Full of vigilance, often skeptical of life

3 Survey results and analysis

After in-depth analysis and induction, the three tree nodes of assignment, guidance and meeting are abstractly summarized as the concepts of event logic, action logic and field logic, which become the basis for the construction of ubiquitous influence-time and space dispersion; academic influence, behavioral influence and personality influence are summarized as the process of constructing ubiquitous influence-mode diversity. The two tree nodes of positive influence and negative influence are summarized as

the positive result of ubiquitous influence and the negative result of ubiquitous influence, which become the result of constructing ubiquitous influence-result comprehensiveness. Therefore, this study deeply analyzes the ubiquitous influence of mentors on graduate students from the perspective of the basis, process and results of the ubiquitous influence.

3.1 The basis of ubiquitous influence Construction——Spatio-temporal dispersion

3.1.1 Event logic

Mentors assign tasks in a variety of forms, which

are widely distributed in the formal and informal communication between mentors and graduate students. It should be noted that with the increasing development of science and technology, more than 2/3 of graduate students said that mentors will often use Wechat to assign learning tasks, which provides a lot of convenience for the communication between mentors and graduate students. Mentors and graduate students can communicate freely and conveniently, and they can communicate at any time and anywhere.

The summary and evaluation in the teaching is a very important teaching part. Through a fair evaluation of the results of the project, it is necessary to improve students' mastery of the knowledge. In project-oriented teaching evaluation, it is necessary to pay attention to the comprehensiveness and process of the evaluation and the practical ability in the evaluation^[10]. The specific evaluated content is as follows. The method of composition evaluation is used to evaluate the team members' ability of cooperation and contribution, mainly including the quality of the project, contribution, compliance with project specifications, and level of defense. Then teachers upload the student's project results and process to the online through videos and netizens' comment. The diversified evaluation can make it more comprehensive and objective.

3.1.2 Action logic

The logic of action is embodied in the direct and indirect guidance to the ubiquity of students. This includes not only the frequency of guidance, but also the mode of guidance. As a "novice" in academic circles, graduate students are still immature in the level of scientific research and academic issues, and need the careful guidance of mentors, who can really "get started" in scientific research ability. The instructor's directional guidance and inspiration will help postgraduates to broaden their research thinking and avoid detours.

3.1.3 Field logic

Field logic is an indispensable carrier to construct the ubiquitous influence of the interaction between mentors and graduate students. In the communication between teachers and students, the meeting between teachers and students is not only limited to formal occasions, but also informal occasions. The ubiquitous meeting between tutors and postgraduates under the field logic increases the opportunities for communication, exchanges ideas with each other, breaks the invisible psychological

barriers between mentors and postgraduates, and activates the ubiquitous influence of mentors on graduate students.

3.2 Ubiquitous influence on the process of Construction——Diversity of ways

3.2.1 Academic influence

The key to the formation of academic ubiquity lies in academic literacy, which covers many factors, such as extensive knowledge, rigorous academic attitude, certain academic level and keen insight into the frontier issues of the discipline. Therefore, the generation of postgraduates' scientific research ability needs the scientific guidance of mentors and help from many aspects. In a word, the tutor's academic belief and academic pursuit are condensed into academic belief, and students will deeply feel the tutor's firm and sincere academic belief in the pluralistic relationship with the mentor.

3.2.2 Personality influence

The mentor's behavior will imperceptibly make the students' character more "calm". Some graduate students made it clear that they did not agree with the mentor's "dealing with the world", thinking that the mentor was "extreme" and "stubborn", and occasionally reminded himself not to be like him. In graduate education, tutors have inestimable influence on graduate students, and the influence of personality on students is more imperceptible, because according to the training system of graduate students, the communication between mentors and graduate students is diversified, informal exchanges are frequent, and the influence of mentors on students' personality is more general.

3.2.3 Behavior influence

In the frequent and close communication between students and mentors, mentors will virtually teach students how to behave in the world. Czech educator Comenius pointed out: "the job of teachers is to educate students with their own examples." "his body is upright, he acts without orders, and his body is not upright, though he does not obey." "Education must be correct". These ancient teachings emphasize the important role of teachers' words and deeds^[6]. Harmonious communication will promote the formation of a symbiotic body of unity and cooperation between teachers and students. the significance of learning to be a teacher is to educate calmly, and the realm of behavior can be honed infinitely.

3.3 The result of ubiquitous influence Construction——result comprehensiveness

3.3.1 Positive results of ubiquitous influence

The positive universal influence in the communication between mentors and graduate students refers to the tutors' promotion of the development of graduate knowledge, the improvement of ability and the shaping of personality. The knowledge construction of graduate students is different from that of undergraduates. Most of the professional basic knowledge of undergraduates is acquired through formal communication with mentors, while the professional basic knowledge and structural knowledge design of graduate students are mainly obtained from self-education and the guidance of mentors. In the process of formal and informal communication between graduate students and mentors, mentors, as the guide of students' academic career, have high academic level, profound knowledge accomplishment and rich teaching experience, which will have a far-reaching impact on students' knowledge construction.

The scientific research ability of graduate students is not achieved overnight, but needs to be gradually formed in strict and standardized scientific research training. The personality charm emitted by the tutor's words and deeds, the discipline spirit of diligent exploration of learning and the attention to the growth of students is a kind of silent spur in itself. The transmission of tacit knowledge can give graduate students courage, confidence and strength.

3.3.2 Negative consequences of ubiquitous influence

The ability of scientific research is the top priority in the training of postgraduates, and many graduate tutors in colleges and universities ignore the cultivation of students' divergent thinking, logical thinking and so on. A graduate student mentioned that "I don't usually communicate with my mentor. I don't think I'm an academic material. I found an easy topic for my graduation thesis and wanted to graduate as soon as possible." when asked by the interviewees, "Why didn't I communicate with the mentor at ordinary times?" he said, "the mentor is too busy" and "the information doesn't come back for a long time." it can be seen that some mentors ignore the cultivation of graduate

students, let alone attach importance to the cultivation of students' innovative thinking. Lead to students in the study of the problem is only stay in the problem can not be in-depth, and even lack of problem awareness.

4 Conclusion

The effective ubiquitous influence of mentors on graduate students is an effective way to improve the training quality of graduate students. However, as far as the current situation is concerned, the emphasis on universal guidance methods of graduate tutors is still insufficient. It mainly comes from the following aspects: lack of scientific research ability, single way of guidance, indifferent relationship between teachers and students, emphasis on administration over students, emphasis on use and neglect of development. All these factors will affect the training quality of graduate students. Therefore, if the tutor really leads the graduate students to the forefront of the discipline and forms research problems, they will take on their own responsibilities in terms of guidance methods and critical innovation. In addition, only by paying attention to appropriate and appropriate guidance for students and committed to the establishment of interactive relationships of ubiquitous influence in formal and informal fields can we effectively promote the growth of postgraduates in knowledge learning, scientific research training and other aspects.

References

- [1] Liu CJ. Research on the Construction Strategy of Intelligent language Laboratory supported by ubiquitous Technology[J]. *Equipment Management*, 2019 (2): 16-18.
- [2] Chen XM. Qualitative research methods and social science research [M]. Beijing: educational Science Press, 2000: 12.
- [3] Guo YX, Liu SM, Wang WG, et al. Analysis of qualitative research data: the treasure book of active use of NVivo8 [M]. Taipei: higher Education Press, 2009: 28.
- [4] Li SQ, Lu LL. Construction of competency Model of head teacher in Colleges and Universities——A case study based on Nvivo Software qualitative method [J]. *Monthly Journal of Education and Learning*, 2014 (5).
- [5] Luo G. Research on the role of mentors in postgraduate moral education [D]. Central China normal University, 2008: 29.
- [6] Wang Q. Give full play to the enthusiasm of graduate tutors and strive to improve the training quality of postgraduates [J]. *Higher Education Research in China*, 2005 (5): 33.